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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/697,253

10/31/2003

Peter S. Ebert

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11/16/2006

EXAMINER

YANG, RYAN R

FISH & RICHARDSON, P.C.

PO BOX 1022

MINNEAPOLIS, MN 55440-1022

ART UNIT

PAPER NUMBER

2628

DATE MAILED: 11/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/697,253

Applicant(s)

EBERT, PETER S.

Examiner

Ryan R. Yang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10,12,15-40 and 42-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10,12,15-40 and 42-57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/7/2006 has been entered.
2. This action is responsive to communications: Amendment, filed on 6/7/2006. This action is non-final.
3. Claims 1-10, 12, 15-40 and 42-57 are pending in this application. Claims 1, 21, 28 and 52 are independent claims. In the Amendment, filed on 6/7/2006, claims 1, 21 and 28 were amended and claims 52-57 were added.
4. The present title of the invention is "Smart radar chart" as filed originally.

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
6. Claims 1-10, 12, 15-33, and 42-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brooks et al (US 2004/0113912) in view of Fushimi et al (US 2004/0070624), and further in view of Ito (US 6,923,653).

Regarding claim 1, Brooks et al, hereinafter Brooks, discloses that the claimed feature of a method comprising:

obtaining data corresponding to one or more data dimensions from a data source [i.e. "data collection"; 6] (See Fig 1); generating a smart radar chart graphical user interface, the smart radar chart graphical user interface comprising a visual representation [i.e. 'graphical representations in Fig 5-9] of the obtained data [i.e. "Qa-QI"] corresponding to the one or more data dimensions [i.e. "Xa-XI"], wherein each data dimension [i.e. "Xa-XI"] is displayed radiating from a central point (See Fig 9), and data [i.e. "Qa-QI"] corresponding to a data dimension is displayed at a position indicating a value of the data in relation to a reference value [i.e. "UL", "LL"] to enable identification of an exception; and rendering the smart radar chart graphical user interface (See Fig 9, [63]), wherein:

data corresponding to a first data dimension is associated with a first range of values (Figure 9, Xa),

data corresponding to a second data dimension is associated with a second range of values (Figure 9, Xb), and

the first data and second ranges of values are unrelated (Xa and Xb are unrelated variables);

Brooks does not specifically disclose the implementation of graphical user interface. However, such limitation is shown in the teaching of Fushimi et al, hereinafter Fushimi, [i.e. "user interface section" within radar chart display control unit; See Fig 2-3]. It would have been obvious to one skilled in the art to incorporate the teaching of Fushimi into the teaching of Brooks, in order to provide user friendly manner of manipulating the graphical representations effectively, as such improvement is also

advantageously desirable in the teaching of Brooks for “the process operator can interact with the display unit to adjust...to see the effect this...” (See [31]).

Brooks and Fushimi do not specifically disclose “the reference value comprises an average value of measured data corresponding to a data dimension and the exception represents a positive or a negative deviation from the reference value”, however, this is known in the art as taught by Ito. Ito discloses a radar chart in which the reference values are average values and the data (G Type) is shown deviated from the average (see Figure 26).

Thus, it would have been obvious to one of ordinary skill in the art to incorporate the teaching of Ito into Brooks and Fushimi because Brooks and Fushimi discloses a method of generating a radar chart and Ito further disclose the radar can have drawing representing reference values and data showing positive and negative deviation in order to help analyze the data.

7. Regarding claim 2, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 1, and Brooks further discloses that generating a first smart radar chart graphical user interface having a first level of detail of the obtained data. (See the graphical representations between Fig 6 and Fig 7, where different level are shown; Also See [158] in Fushimi et al)

8. Regarding claim 3, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 2, and Brooks further discloses that a second level of detail of the obtained data for one ore more dimensions displayed in the first smart

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radar chart graphical user interface. (See the graphical representations between Fig 6 and Fig 7, where different level are shown; Also See [158] in Fushimi et al)

9. Regarding claim 4, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 3, and Brooks further discloses that a second smart radar chart in response to user manipulation of an input device. (See [31-33]; Also See [158] in Fushimi et al)

10. Regarding claim 5, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 1, and Brooks further discloses that obtaining data from a remote data source. (See [24] in Fig 2, [46],[49])

11. Regarding claim 6, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 5, and Brooks further discloses that obtaining data using a communications link. (See [24] in Fig 2, [46],[49])

12. Regarding claim 7, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 1, and Brooks further discloses that obtaining data periodically [i.e. discrete operation"]. (See [15])

13. Regarding claim 8, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 1, and Brooks further discloses that obtaining data continuously [i.e. "continuous operation"]. (See [15])

14. Regarding claim 9, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 1, and Fushimi further discloses that obtaining data in response to an occurrence of an event. [i.e. "input interface"; 15 in Fig 2, See [51-55]]

15. Regarding claim 10, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 1, and Fushimi further discloses that the event comprises a user input. [i.e. "input interface"; 15 in Fig 2, See [51-55]]

16. Regarding claim 12, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 1, and Brooks further discloses that the reference value comprises a dynamically computed value. (See Fig 5-7, [25-34])

17. Regarding claim 15, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 1, and Brooks further discloses that the reference value comprises a predetermined value. (See Fig 9, [63])

18. Regarding claim 16, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 16, and Fushimi further discloses normalizing ["normalizing"] the data. (See [116-117])

19. Regarding claim 17, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 16, and Brooks further discloses displaying the data [i.e. "Qa-QI"] in relation to a representation of the reference value [i.e. "LL", "UL"]. (See Fig 9, [63])

20. Regarding claim 18, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 16, and Brooks further discloses the reference value is dynamically computed based on the obtained data. (See Fig 5-7, [25-34])

21. Regarding claim 19, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 1, and Brooks further discloses indicating a difference between the data and the reference value. (See Fig 9, Abstract)

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22. Regarding claim 20, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 1, and Brooks further discloses generating an audible alert ["alarm" i.e. 'sounding alarm'] indicating presence of an exception. (See Abstract, Fig 1,2,5)

23. Regarding claims 21-25 and 27, claims 21-25 and 27 are similar in scope to the claims 1-3, 5, 17 and 19, respectively, and thus the rejection to claims 1-3, 5, 17 and 19 hereinabove are also applicable to claims 21-25 and 27, respectively.

24. Regarding claim 26, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 25, and Brooks further discloses generating a representation of the data at distance proportional to a magnitude of a deviation of the data from the reference value. (See Fig 9, [63]; Also See [42],[59],[89],[127] in Fushimi)

25. Regarding claim 28, refer to the discussion for the claim 1 hereinabove, Brooks also discloses that the claimed feature of a graphical user interface that enables perception of information regarding one or more data dimensions, the interface comprising:

- a data presentation area [i.e. "display unit"; 12];

- a visual representation [Fig 5-9] within the data presentation area [12] based upon data corresponding to one ore more data dimensions [Xa-XI], wherein each data dimension is displayed radiating from a central point in a common plane (See Fig 9), and data corresponding to a data dimension is displayed at a position indicating a value of the data [Qa-QI] in relation to a reference value [UL,LL] to enable identification of an exception. (See Fig 1, Fig 9, [63])

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26. Regarding claims 29-30, claims 29-30 are similar in scope to the claims 2-3, respectively, and thus the rejection to claims 2-3 hereinabove are also applicable to claims 29-30, respectively.

27. Regarding claims 31-33, refer the discussion for the claim 1 hereinabove, and Fushimi further discloses that the second representation is activated in response to user overt selection of a designated portion of the first representation using a user input device, where a position of an input device relative to a user interface. (See [158])

28. Regarding claims 42-43, 45-46 and 48, claims 42-43, 45-46 and 48 are similar in scope to the claims 15, 17, 26 and 19-20, supra, respectively, and thus the rejection to claims 15, 17, 26 and 19-20 are also applicable to claims 42-43, 45-46 and 48, respectively.

29. Regarding claim 44, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 43, and Brooks further discloses that the representation of the reference value comprises a reference circle. (See Fig 9)

30. Regarding claim 47, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 128 and Brooks further discloses that a summary indicator is rendered based on the value of the data. (See Fig 5-9)

31. Regarding claim 49, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 1, and Brooks further discloses that displaying positive exceptions in a different color from negative exceptions. (See [21],[30],[35])

32. Regarding claims 50-51, claims 50-51 are similar in scope to the claim 49, and thus the rejection to claim 49 hereinabove is also applicable to claims 50-51.

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33. As per claim 52, Brooks, Fushimi and Ito discloses all the elements as in claim 1 and Ito further discloses the reference value for the displayed data dimension is normalized across reference values for other displayed data dimensions (Figure 20 where the average line is the normalized across reference values).

Thus, it would have been obvious to one of ordinary skill in the art to incorporate the teaching of Ito into Brooks and Fushimi because Brooks and Fushimi disclose a method of displaying data in radar chart and Ito discloses the reference values could be normalized in order help compare the data in perspective.

34. As per claim 53, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 52. Since the claim limitations are similar to claims 2-3 combined, it is further rejected as claims 2-3 combined.

35. As per claim 54, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 52. Since the claim limitations are similar to claims 5-6 combined, it is further rejected as claims 5-6 combined.

36. As per claim 55, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 52. Since the claim limitations are similar to claims 7-8 combined, it is further rejected as claims 7-8 combined.

37. As per claim 56, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 52. Since the claim limitations are similar to claim 19, it is further rejected as claim 19.

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38. As per claim 57, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 52. Since the claim limitations are similar to claims 12 and 15 combined, it is further rejected as claims 12 and 15 combined.

39. Claims 34-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brooks et al (US 2004/0113912), Fushimi et al (US 2004/0070624), Ito, and further in view of Slotznick (6,011,537).

Regarding claim 34, Brooks fails to disclose that the second representation is rendered in a pop-up window. However, utilizing of pop-up window to display new contents is shown in the teaching of Slotznick. (See col 3 line 24-36) It would have been obvious to one skilled in the art to incorporate the teaching of Slotznick into the teaching of Brooks et al, in order to improve user's responsiveness for observing the graphical representation (as pop-up window is more noticeable by user), as such improvement is also advantageously desirable in the teaching of Brooks et al for rendering multiple graphical representations with user friendly manner.

40. Regarding claim 35, refer to the discussion for the claim 34 hereinabove, Slotznick further discloses that the second representation is rendered as an overlay to the first representation. (See Fig 17, col 38 line 11-24)

41. Regarding claims 36-38, refer to the discussion for the claim 34 hereinabove, Slotznick further discloses that automatically closing the second representation based upon an expiration of a predetermined length of time. (See col 38 line 25-64)

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42. Regarding claim 39-40, refer to the discussion for the claim 34 hereinabove, Slotznick further discloses that the intent to close the second representation is inferred based upon a position/input of a user input device. (See Fig 17, col 38 line 25-64)

Claim Rejections - 35 USC § 112

43. Claims 1-10, 12, 15-40 and 42-51 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. As per claims 1, 21 and 28, the added limitations claims two data sets are unrelated. The disclosed specification and drawings do not support such claim limitations because the variables used in the drawings are related to supply chain management.

Response to Arguments/Amendments

44. Applicant's arguments filed 6/7/2006 have been fully considered but they are not persuasive.

Applicant alleges the amended claim overcame the present rejections. In reply, Examiner considers the term "unrelated" is a vague term. On one hand, Examiner considers the specification disclosed variable could be related because they are parameters used in supply chain management. On the other, prior art Brooks's variables could be unrelated because they are independent from each other.

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As per claim 52, Examiner considers the existing Ito reference teaches the "reference values ... is normalized across reference values for other displayed data dimensions" because the average value could be considered as a reference value.

Conclusion

45. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan R Yang whose telephone number is (571) 272-7666. The examiner can normally be reached on M-F 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on (571) 272-7664. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ryan Yang
Primary Examiner
November 12, 2006